

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : James S. Norris et al. Art Unit : 1633
Serial No. : 10/082,973 Examiner : Janet L. Epps-Ford
Filed : February 26, 2002 Conf. No. : 8113
Title : TISSUE-SPECIFIC AND TARGET RNA-SPECIFIC RIBOZYMES

Mail Stop Amendment

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF JAMES S. NORRIS UNDER 37 C.F.R. § 1.131

I, James S. Norris, hereby declare as follows:

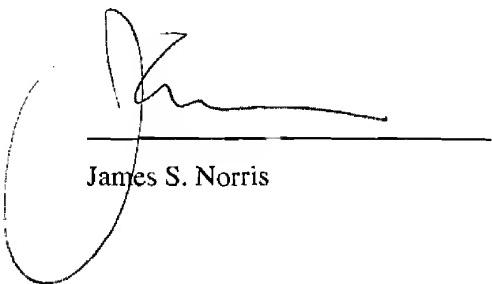
1. I am an inventor of currently pending claims 39-55 of the above-referenced patent application.
2. In an Office Action dated January 11, 2007, claims 39, 43-48, 50-51, and 53-55 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Norris *et al.* (WO98/24925).
3. The Norris *et al.* reference lists its publication date as June 11, 1998.
4. Prior to June 11, 1998, and thus necessarily before the publication date of the Norris *et al.* reference, Gary A. Clawson, Michael G. Schmidt, Brian D. Hoel, Wei-Hua Pan, Joseph W. Dolan, and I worked together in this country to complete the conception of the invention recited in present claims 39, 43-48, 50-51, and 53-55 of the above-referenced patent application, and to reduce said invention to practice, as evidenced by a copy of pages from Ping Xin's laboratory notebook and pages from Shani Schalles' laboratory notebook, each produced under Gary A. Clawson's supervision, which is attached as Exhibit A. The pages include multiple examples of pCHOP

sequences. The dates on these pages, all of which are prior to June 11, 1998, have been blacked out.

5. I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

6/11/05
Date

60427105.doc


James S. Norris

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF GARY A. CLAWSON UNDER 37 C.F.R. § 1.131

I, Gary A. Clawson, hereby declare as follows:

1. I am an inventor of currently pending claims 39-55 of the above-referenced patent application.
2. In an Office Action dated January 11, 2007, claims 39, 43-48, 50-51, and 53-55 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Norris *et al.* (WO98/24925).
3. The Norris *et al.* reference lists its publication date as June 11, 1998.
4. Prior to June 11, 1998, and thus necessarily before the publication date of the Norris *et al.* reference, James S. Norris, Michael G. Schmidt, Brian D. Hoel, Wei-Hua Pan, Joseph W. Dolan, and I worked together in this country to complete the conception of the invention recited in present claims 39, 43-48, 50-51, and 53-55 of the above-referenced patent application, and to reduce said invention to practice, as evidenced by a copy of pages from Ping Xin's laboratory notebook and pages from Shani Schalles' laboratory notebook, each produced under my supervision, which is attached as Exhibit A. The pages include multiple examples of pCHOP sequences. The dates on these pages, all of which are prior to June 11, 1998, have been blacked out.

Applicant : James S. Norris et al.
Serial No. : 10/082,973
Filed : February 26, 2002
Page : 2 of 2

Attorney's Docket No.: 14017-004002 / PSU 96-
1566

5. I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

JUNE 11, 2007
Date

Gary A. Clawson
Gary A. Clawson

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : James S. Norris et al. Art Unit : 1633
Serial No. : 10/082,973 Examiner : Janet L. Epps-Ford
Filed : February 26, 2002 Conf. No. : 8113
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Alexandria, VA 22313-1450

DECLARATION OF MICHAEL G. SCHMIDT UNDER 37 C.F.R. § 1.131

I, Michael G. Schmidt, hereby declare as follows:

1. I am an inventor of currently pending claims 39-55 of the above-referenced patent application.

2. In an Office Action dated January 11, 2007, claims 39, 43-48, 50-51, and 53-55 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Norris *et al.* (WO98/24925).

3. The Norris *et al.* reference lists its publication date as June 11, 1998.

4. Prior to June 11, 1998, and thus necessarily before the publication date of the Norris *et al.* reference, James S. Norris, Gary A. Clawson, Brian D. Hoel, Wei-Hua Pan, Joseph W. Dolan, and I worked together in this country to complete the conception of the invention recited in present claims 39, 43-48, 50-51, and 53-55 of the above-referenced patent application, and to reduce said invention to practice, as evidenced by a copy of pages from Ping Xin's laboratory notebook and pages from Shani Schalles' laboratory notebook, each produced under Gary A. Clawson's supervision, which is attached as Exhibit A. The pages include multiple examples of pCHOP sequences. The dates on these pages, all of which are prior to June 11, 1998, have been blacked out.

5. I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.



11 June 2007

Date

Michael G. Schmidt

Dr Schmidt's signature page.doc

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No. : 10/082,973 Examiner : Janet L. Epps-Ford
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P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF BRIAN D. HOEL UNDER 37 C.F.R. § 1.131

I, Brian D. Hoel, hereby declare as follows:

1. I am an inventor of currently pending claims 39-55 of the above-referenced patent application.
2. In an Office Action dated January 11, 2007, claims 39, 43-48, 50-51, and 53-55 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Norris *et al.* (WO98/24925).
3. The Norris *et al.* reference lists its publication date as June 11, 1998.
4. Prior to June 11, 1998, and thus necessarily before the publication date of the Norris *et al.* reference, James S. Norris, Michael G. Schmidt, Gary A. Clawson, Wei-Hua Pan, Joseph W. Dolan, and I worked together in this country to complete the conception of the invention recited in present claims 39, 43-48, 50-51, and 53-55 of the above-referenced patent application, and to reduce said invention to practice, as evidenced by a copy of pages from Ping Xin's laboratory notebook and pages from Shani Schalles' laboratory notebook, each produced under Gary A. Clawson's supervision, which is attached as Exhibit A. The pages include multiple examples of pCHOP sequences. The dates on these pages, all of which are prior to June 11, 1998, have been blacked out.

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June 16 '07

Date

Brian D. Hoel

Brian D. Hoel

60427111.doc

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Serial No. : 10/082,973 Examiner : Janet L. Epps-Ford
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DECLARATION OF WEI-HUA PAN UNDER 37 C.F.R. § 1.131

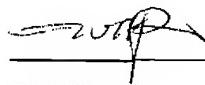
I, Wei-Hua Pan, hereby declare as follows:

1. I am an inventor of currently pending claims 39-55 of the above-referenced patent application.
2. In an Office Action dated January 11, 2007, claims 39, 43-48, 50-51, and 53-55 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Norris *et al.* (WO98/24925).
3. The Norris *et al.* reference lists its publication date as June 11, 1998.
4. Prior to June 11, 1998, and thus necessarily before the publication date of the Norris *et al.* reference, James S. Norris, Michael G. Schmidt, Brian D. Hoel, Gary A. Clawson, Joseph W. Dolan, and I worked together in this country to complete the conception of the invention recited in present claims 39, 43-48, 50-51, and 53-55 of the above-referenced patent application, and to reduce said invention to practice, as evidenced by a copy of pages from Ping Xin's laboratory notebook and pages from Shani Schalles' laboratory notebook, each produced under Gary A. Clawson's supervision, which is attached as Exhibit A. The pages include multiple examples of pCHOP sequences. The dates on these pages, all of which are prior to June 11, 1998, have been blacked out.

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6-11-07

Date



Wei-Hua Pan

06/13/2007 10:23 7924882 MICRO PAGE 02/04
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Jun 13 2007 8:16PM HP LASERJET FRX p.2
06/11/2007 14:39 7924882 MICRO
PAGE 02/03

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Alexandria, VA 22313-1450

DECLARATION OF JOSEPH W. DOLAN UNDER 37 C.F.R. § 1.131

I, Joseph W. Dolan, hereby declare as follows:

1. I am an inventor of currently pending claims 39-55 of the above-referenced patent application.
2. In an Office Action dated January 11, 2007, claims 39, 43-48, 50-51, and 53-55 were rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by Nomis et al. (WO98/24925).
3. The Nomis et al. reference lists its publication date as June 11, 1998.
4. Prior to June 11, 1998, and thus necessarily before the publication date of the Nomis et al. reference, James S. Norris, Michael G. Schmidt, Brian D. Hoel, Wei-Hua Pan, Gary A. Clawson, and I worked together in this country to complete the conception of the invention recited in present claims 39, 43-48, 50-51, and 53-55 of the above-referenced patent application, and to reduce said invention to practice, as evidenced by a copy of pages from Ping Xin's laboratory notebook and pages from Shami Schalles' laboratory notebook, each produced under Gary A. Clawson's supervision, which is attached as Exhibit A. The pages include multiple examples of pCHOP sequences. The dates on these pages, all of which are prior to June 11, 1998, have been blacked out.

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PAGE 03/04

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p.3

06/11/2007 14:39 7924882

MICRO

PAGE 03/03

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6/13/07

Date

Joseph W. Dolan

Joseph W. Dolan

60427107.doc



Model 377
Version 2.1.1

19-GC383

Signal G:354 A:393 T:181 C:274
DT4%Ac{A Set-AnyPrimer}

Page 1 of 3
9:42 AM

PRISM
Data Collection

File: 19-GC383
Sample: GC383
Comment:
Lane Number: 19
Channel Number: 100
Number of Scans: 11812
Length: 898
Run started at: 12:49
Run stopped at: 22:49
Gel: Gel File
Dyeset/Primer: DT4%Ac(A Set-AnyPrimer)
Comb: 36-well sharks-tooth
Instrument Name: 377
Collect Vers.: N/A

Data Analysis

Base Call Start: 1323
Base Call End: 11812
Primer Peak Loc.: 1323
Signal: G (354), A (393), T (181), C (274)
Matrix Name: Rhodamine
Channels Ave.: 3
Analysis Vers.: Version 2.1.1
Base Spacing: 12.29 - ABI100



Model 377
Version 2.1.1

19-GC383

GC3B3
Lane 19

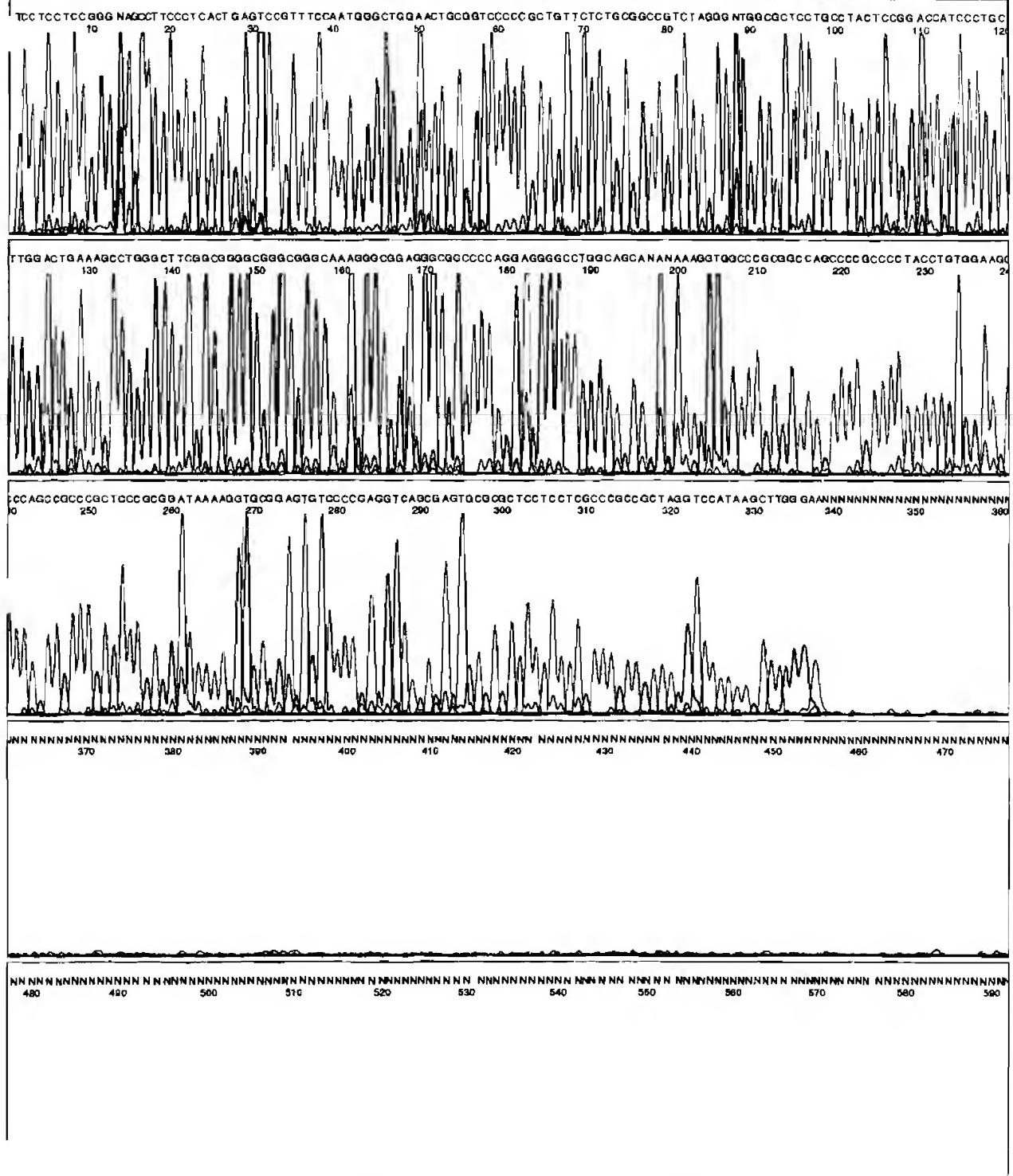
Signal G:354 A:393 T:181 C:274

DT4%Ac(A Set-AnyPrimer)

Rhodamine

Points 1323 to 11812 Base 1: 1323

Page 2 of 3



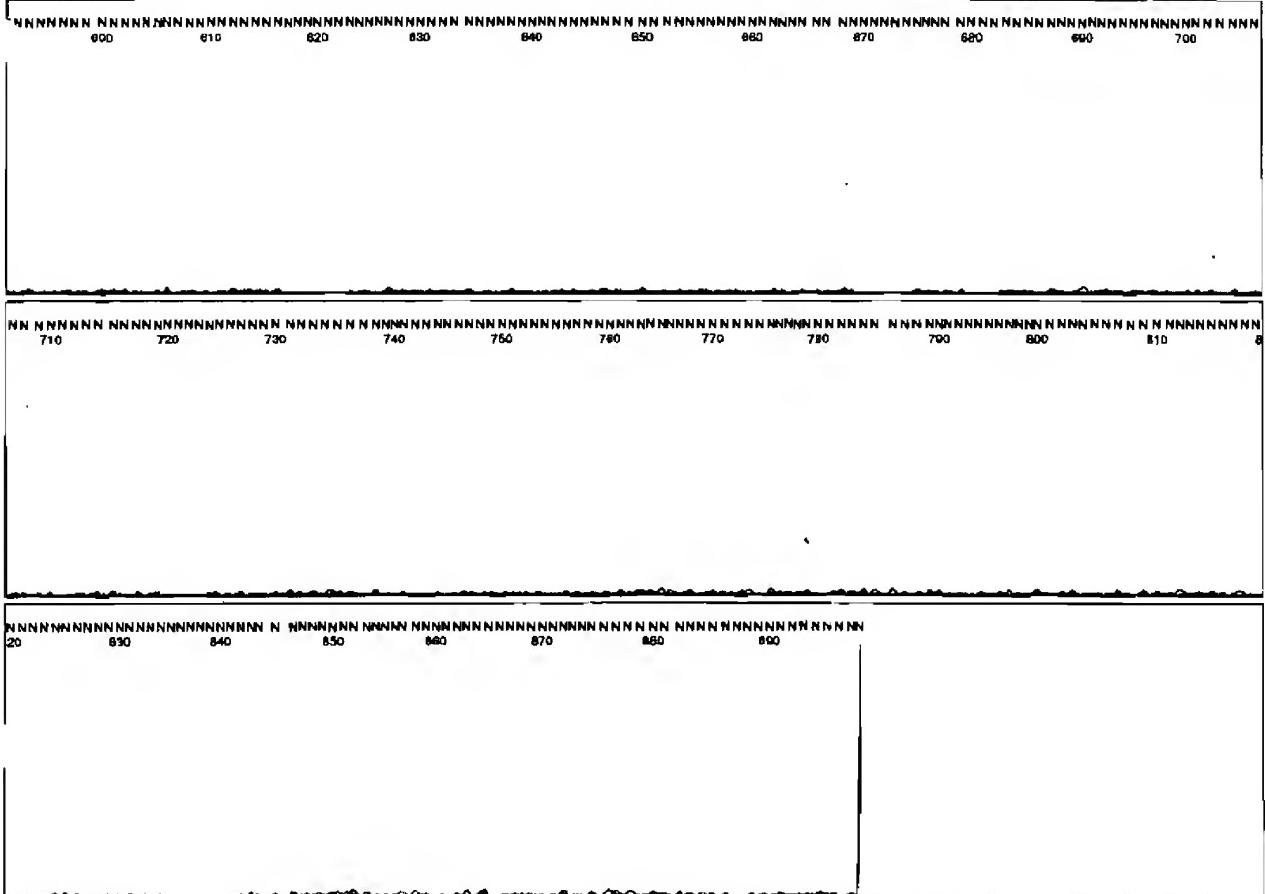


Model 377
Version 2.1.1

19-GC383
GC383
Lane 19

Signal G:354 A:393 T:181 C:274
DT4%Ac(A Set-AnyPrimer)
Rhodamine
Points 1323 to 11812 Base 1: 1323

Page 3 of 3



EFFICIENCY LINE: 22-206

K7 promoter -- Continue S.I.

Expt. 1/1/1993.

1 Cut E/K β from pEX-GFP-1 with SalI + KpnI. (E)
2 Isolate vector digests L + L, blunt.

3 Cut pCMV β with EcoRI + XbaI, blunt.

4 Ligate ① + ②.

5 Check orientation; cut with HindIII



1	2	3	4	5	6	7	8	9
1	2	3	4	5	6	7	8	9
Do PCR again.								
Block 2.				Block 3				Block 1
52°C annealing.				* 56°C				60°C
# 1, 2, 3.				* 4, 5, 6.				# 7, 8, 9.
1, 4, 7. Tag				Tag buffer				
2, 5, 8. pfu				pfu buffer				
3, 6, 9. pfu				Tag buffer				

52 55 60

PCR Program:

94°C. 2 min.

94°C. 45"

Annealing 45"

72°C. 1'20"

28 Cycles



PCR Mix as before.

Q↑, EtOH↓ (2+5).

Right product should be ~380.

+ 41 μl H₂O; 1 μl Qc432 (QIND/Chop).

+ 2.5 μl Buffer2; 2.5 μl Buffer4.

1.5 μl pme. 1.5 μl Hind λ . 37°C. 1-15 — 4-15.



1	2	3	4	5	6	7	8	9	
1	2	3	4	5	6	7	8	9	
2	3	4	5	6	7	8	9	10	
3	4	5	6	7	8	9	10	11	
4	5	6	7	8	9	10	11	12	
5	6	7	8	9	10	11	12	13	
6	7	8	9	10	11	12	13	14	
7	8	9	10	11	12	13	14	15	
8	9	10	11	12	13	14	15	16	
9	10	11	12	13	14	15	16	17	
10	11	12	13	14	15	16	17	18	
11	12	13	14	15	16	17	18	19	
12	13	14	15	16	17	18	19	20	
13	14	15	16	17	18	19	20	21	
14	15	16	17	18	19	20	21	22	
15	16	17	18	19	20	21	22	23	
16	17	18	19	20	21	22	23	24	
17	18	19	20	21	22	23	24	25	
18	19	20	21	22	23	24	25	26	
19	20	21	22	23	24	25	26	27	
20	21	22	23	24	25	26	27	28	
21	22	23	24	25	26	27	28	29	
22	23	24	25	26	27	28	29	30	
23	24	25	26	27	28	29	30	31	
24	25	26	27	28	29	30	31		
25	26	27	28	29	30	31			
26	27	28	29	30	31				
27	28	29	30	31					
28	29	30	31						
29	30	31							
30	31								
31									

GT ZfOH ↓
Keep in -20°C

Ligation. add 17 uL H₂O, 2 uL Ligation

Buffer, 1 uL Ligast, RT, 4 h

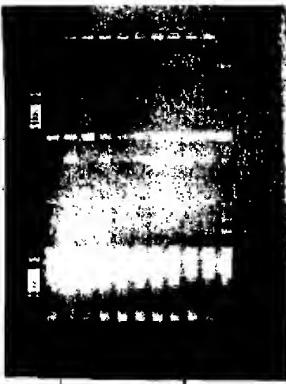
Transform to DH5 α -

Grow 10 colonies. PCR screen the

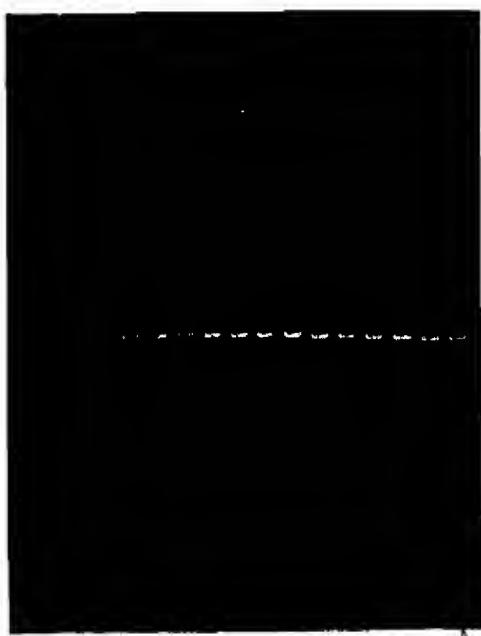
~70 bp 1-10, primer 387 + 388, pIND/CheR control

~380 bp 11-20, " "

Run on 1.5% agarose gel.



1 Redo PCR. Cut together with ~~Gc~~ ~~H~~ 32.
2 ~~AT~~-ZfOHV. ligation. Transform. PCR screen.

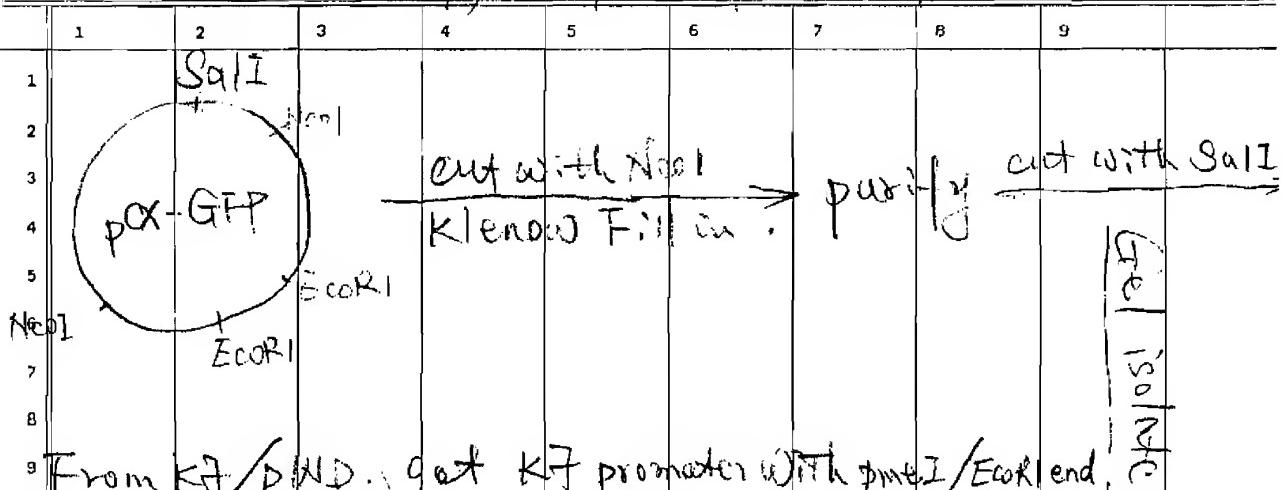


5
6
7
8
9
10
11 PIND/chop
12
13
14
15
16
17
18 PIND only
19
20
21
22
23
24
25
26
27
28
29
30
31

PIND/chop. PCR with Clae 387 + 388.
product is about 350 bp. After add K7
promoter, PCR product should be 700^{+/-} bp.

Because there are two pmeI site in
PIND, plan to clone K7 to pmeI/HincII.
gap is wrong from beginning. That's why
S's can't get it. S's design it.

Enhancer / K7 / GFP ... pCX-GFP

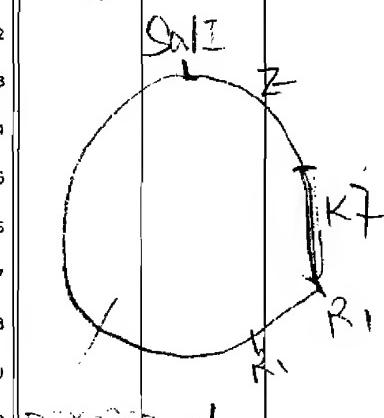


From K7/pND... get K7 promoter with pntB/EcoRI end

(Gel isolate 300 bp band)

Cut pCX-GFP with SalI, partial cut EcoRI.
keep R1 frag.

Ligation:



Enhancer /K7 /Snip /pox-~~GFP~~

	1	2	3	4	5	6	7	8	9	
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
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28										
29										
30										
31										

① pox-GFP-1

SalI

K7

R1

HindII

② get Snip cassette with HindII/XbaI ends.

③ cut pox-GFP, with HindII, blunt. Ligate.
cut it again with EcoRI. R+ ligate large band.
cut it with SalI+XbaI. isolate large band.

Ligation ① + ② + ③.



Model 377
Version 2.1.1

03-GC387

Signal G:463 A:365 T:294 C:482
DT {BD Set Any-Primer}

Page 1 of 3
9:35 AM

data Collection

File: 03-GC387
Sample: GC387

Comment:

Lane Number: 3
Channel Number: 31
Number of Scans: 11812
Length: 904

Run started at: [REDACTED] 15:44
Run stopped at: [REDACTED] 01:44
Gel: Gel File
Dyeset/Primer: DT {BD Set Any-Primer}
Comb: 36-well sharks-tooth
Instrument Name: 377
Collect Vers.: N/A

Data Analysis

Base Call Start: 1246

Base Call End: 11812

Primer Peak Loc.: 1246

Signal: G (463), A (365), T (294), C (482)

Matrix Name: dRhodamine

Channels Ave.: 3

Analysis Vers.: Version 2.1.1

Base Spacing: 11.85 - ABI100

1	CCCGCTTTT AGGTGACACT ATAGAATACT CAAGCTATGC ATCAAGCTTIT GGAAACCCTGTA TGAGTCGGTG	70
71	AGGA[GAAAC GATGACATT TCCTGACCAAG ATTCACCGTC AGCAGAAATGT CATCGTCGGT TCCAGGATCC	140
141	TTCGCTGAAT TCCAAGGGTC TGCGCAACGA CGACGATGAG GTACCCACATC GTGCGCTGTG CGCACTGATG	210
211	AGGCGGTGAG CGCGAAACCC TTGACCGGTT CCTATGGGGC CGCTCAGAG GGCCTAACCC GCGCTATAGT	280
281	GAGTCGTATT ACAATTCACT GGCGCTGGT TTACAACGTC GTGACCTGGGA AAACCCCTGGC GTTACCCAAAC	350
351	TTAACCGCCT TCCAGCACAT CCCCTTTTCG CGAGCTGGCG TAATAGCGAA GAGGGGGGCA CGGATCGGCC	420
421	TTCCAACAG TTGCGCAGCC TGAATGGGGA ATGGACGGGC CGTGTAGCGG CGCATTAAGC GGGCGGGGTG	490
491	TGGTGGTTAC CGCCAGGTG ACCCGTACAC TTGCCAGGGC CCTAGGGCCC GTCCTTTOG CTTCCTTCCC	560
561	TTCCCTTCCTC CGCAAGTTG CGGGCTTTCC CGCTCAAGCT CTAAATGGG CGCTCCCTT AGGTTCGGA	630
631	TTAAATGCTT TACGGGACCT TCGACCCCAA AAAACTGTAT TAGGGTATG GTTCAGGAA TGGGCCAFTG	700
701	NCCUGATAGA CGGTTTTTCG CCCTTTGACG TTGGAAAGTC CACGTCTTT ATAAGGGA CTCCTGTTCC	770
771	AAACTGGAAC ACCACTTAA CCCTTATCTT GGGGTATTC NTTGGTATTT TATNANGGA TTTTGGCCGA	840
841	TTTNGGCC TATTGGGT AAAAAATGA ANCTGGNITT TAACCAAAA TTTAACCGC GNAA	910

Chop/cut Right! Save

Cloud 15.



Model 377
Version 2.1.1

26-GC446

Signal G:149 A:117 T:103 C:116
DT {BD Set Any-Primer}

Page 1 of 3
8:46 AM

Data Collection

File: 26-GC446
Sample: GC446
Comment:
Lane Number: 26
Channel Number: 128
Number of Scans: 12992
Length: 1057
Run started at: [REDACTED] 16:55
Run stopped at: [REDACTED] 03:56
Gel: Gel File
Dyeset/Primer: DT {BD Set Any-Primer}
Comb: 36-well sharks-tooth
Instrument Name: 377
Collect Vers.: N/A

Data Analysis

Base Call Start: 1362
Base Call End: 12992
Primer Peak Loc.: 1362
Signal: G (149), A (117), T (103), C (116)
Matrix Name: dRhodamine
Channels Ave.: 3
Analysis Vers.: Version 2.1.1
Base Spacing: 12.23 - ABI100

1	GACGGCAGT	GAATTGTAA	TACGACTCACT	AATAGGGCGAA	TTCGGGCCCTC	TAGACGGGCGC	GCATAGGAAC	70
71	GCGTCAAGGG	TTCGGGCCCTC	ACGGGCTCAT	CAGTGCCCAA	CGACCGACAT	GTGGTACCTC	ATCTGTCGTCG	140
141	TTCGGCAGAC	CCCTGGAAIT	CAGGCAAGGA	TCTTGGAAACC	CAAGCATGACA	TCTCTCTGAC	CGTGAATCTG	210
211	GTCAGCAGAA	TGTCATCGIT	TGTCCTCAC	GGACTCATCA	GGGTCTCAAA	GCTTCATGCA	TAGCTTGAGT	280
281	ATCTCTAATG	TGTCACCTAAA	TAGCTTGGCC	TAATCAATGGT	CATAGCTGTT	TCTCTGTTGTA	AAATGTTTATC	350
351	CGCTCACAAAT	TCCACACAAAC	ATACGAGCGG	GAAGCATAAA	GIGTAAAGCC	TGGGGTGCGCT	AAATGAGTCAG	420
421	CTAACCTACA	TTAAATGGGT	TGGCTCACT	CCCCCTTTC	CAGTCGGGAA	ACCTCTGCGG	CCAGCTGCCAT	490
491	TAATGAATCG	GCCAACCGGC	GGGGAGAGGC	GGTTTGCGTA	TGGGGCGCTC	TTCCTCTTCC	TGCTCACTG	560
561	ACTCGCTGCG	CICGGTCGTT	CGGCTGGGGC	GAGCGGTATC	ACCTCACTCA	AAGCCGGTAA	TACCGGTTAT	630
631	CCACAGAAATC	AGGGGGATAA	CGCAAGGAAA	GAACATGTGA	ACCAAAAGG	CCAACCCAAA	AGGCCCCAGGA	700
701	ACCGTAAAAAA	AGGCCCCGGT	TGCTTGGGT	TTCCTCCATAN	GTTCGGCNCC	CCCTTGGACG	AAGCATTACA	770
771	AAAAATCGAC	GCTTAAAGTC	AANAAGGTG	GGCGAAAACC	CGCACAGGA	CTTNTTAAAA	GATAACCCAAG	840
841	GGCGTTTINC	CCCCCTTGGG	AAAGCCTTCC	CTTCTGGCG	CTTCTTCCCTT	GGTTCGGAA	ACCTCTGGCC	910
911	CGGTAAACC	CGGGATTACC	CTGGINCCGG	CTTCTTCTTTC	CCCTTGGGG	AAANCCTTGG	GGNGNCCTTT	980
981	CTTNNATTAG	NNTTAACGNN	TGTAAGGGNN	ATCTCTNAT	TTCGGGNGIT	AAGGTCGGIT	CTGNTTCTCA	1050
1051	AANCCTC							1120

dG - chop / PCR = Right.

Cloud (04) Sure;

#9



Model 377
Version 2.1.1

19-GC432

Signal G:134 A:105 T:95 C:106
DT {BD Set Any-Primer}

Page 1 of 3
9:02 AM

Data Collection

File: 19-GC432
Sample: GC432

Comment:

Lane Number: 19

Channel Number: 99

Number of Scans: 12992

Length: 1045

Run started at: [REDACTED] 15:25

Run stopped at: [REDACTED] 02:26

Gel: Gel File

Dyeset/Primer: DT {BD Set Any-Primer}

Comb: 36-well sharks-tooth

Instrument Name: 377

Collect Vers.: N/A

Data Analysis

Base Call Start: 1304

Base Call End: 12992

Primer Peak Loc.: 1304

Signal: G (134), A (105), T (95), C (106)

Matrix Name: dRhodamine

Channels Ave.: 3

Analysis Vers.: Version 2.1.1

Base Spacing: 12.06 - ABI100

Hind II

1	CAGAAAGAAG AACTCACACA CAGCTTACCGT TTAAACTTAA CCTTGTGGAAC CCTGATGAGT CGGTGAGGAC	70
71	GAAACCATGA CATTCTGGTC ACCAGATICA CGGTCAAGCAG AATGTCATCG TCGGTTCAG GATCTTGC	140
141	TGAATTCCAA CGGTCTGGCC AACGAAGAOG ATGAGGTAC ACATCTCGT CGTTGCGCAC TGATGAGGCC	210
211	GTGAGGCCGA AACCTTGAC CGGTCTCTAT CGGGCGGCTC TAGAGGGCCG GTTAAACCC GCTGATCAAC	280
281	CTGACTGTG CTCCTCTAGTT GCGAAGCATC TGTGTTGTC CGCTCCCGT GACCTGGAA	350
351	GGTGOCACTC CCACGTGCTT TCTCTATAAA AATGAGGAAA TTGCTATGCA TGTCTGAGT AGGTGTCATT	420
421	CTATCTGGG GGGGGGGTG GGGCAGGACA GCAAGGGGA GGATGGGAA CACANINNNN NNNTGGTGG	490
491	GGATGNNNN GGGVINTATG GTTNTGAGG CNNGAAAGAA CCANIGGGN TINNGGGGN NINNNACNN	560
561	GNNTGNNNN GNNNNNNNA GNGGGGGNG NNGNNNGGN NNNNGCAGN GNGNCGNVN NNNINGNNNN	630
631	GNNNNNNTAG NGNNNNNNN TNNNNNNNN NNINNNNNC TINNNNGNNN NGNNNNNNG GNNTINNNNN	700
701	GNNNNGNNN NNNNNNNNN NGGGNNNNNN TNNNGGGNN NNNNNNNNN NNGNNNNNN NNNNNNNNN	770
771	NNNNNNNN NNNNNNNNN NNGNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN	840
841	NNNNNNNN TNNNNNNNN NNNNNNNNN NNNNNNNN NNNNNNNN NNANNNNNN CNVNNNNNN	910
911	NNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN	980
981	NNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNNNNNNN NNNCC	1050

pIND / chop : Right !

Sample :



Model 377
Version 2.1.1

17-GC430

Signal G:275 A:261 T:228 C:256
DT {BD Set Any-Primer}

Page 1 of 3
9:01 AM

Data Collection

Title: 17-GC430
Sample: GC430

Comment:

Lane Number: 17
Channel Number: 90
Number of Scans: 12992
Length: 1057

Run started at: [REDACTED] 15:25
Run stopped at: [REDACTED] 02:26

Gel: Gel File

Dyeset/Primer: DT {BD Set Any-Primer}
Comb: 36-well sharks-tooth

Instrument Name: 377

Collect Vers.: N/A

Data Analysis

Base Call Start: 1267

Base Call End: 12992

Primer Peak Loc.: 1267

Signal: G (275), A (261), T (228), C (256)

Matrix Name: dRhodamine

Channels Ave.: 3

Analysis Vers.: Version 2.1.1

Base Spacing: 11.93 - ABI100

1	CCACCTTTT AGGTGACACT ATAGAAATCT CAAGCTAATGC ATCAGCTTT GGAAACCCCTGA TGAGTCGGTG	70
71	AGGACGAAAC GATGACATTG TGCTGACCGAG ATTACACGGTC AGCGAAATGT CATCGTCGGT TCCAGGAATCC	140
141	TTCAGAACACT ATAGAGTCGG TGAGCAAGAG ACGAGGATCG AATTCTAAGG GTCTGGCAA CGACGAOGAT	210
211	GAGGTACACAC ATCGTCGGTG TTGGCAACTG ATGAGGGCGT GAGCCCGAAA CCCTTGACGC GTTCTTAATGC	280
281	GGCCGCTCTA GAGGGGCCAA TTTCGGCTAT AGTGAGGCGT ATTACAATTC ACTGGCCGTC GTTTTACAAAC	350
351	GTGGTGACTG GGAAAACCCCT GGCGTTAACCC AACTTAAATCG CCTTGGAGCA CATCCCCCTT TGGCAGCTG	420
421	GGTAAATAGC GAAGAGGCCG GCACCGATCG CCCTTCCCAA CAGTGGCGCA GCTCTGAATGG CGAATGGACG	490
491	GGCCCTGTAG CGGGCCATTG AGCGGGCGG GTGTGGTGGT TACCGGCAGC GTGACCGCTA CACTTGGCAG	560
561	GGCCCTTAGCG CGGGCTCCCTT TCCCTTCTTT CTGGCCACGT TOGCCGGCTT TCCCGCTCAA	630
631	AGCTCTAAAT CGGGGGCTTC CCTTTAGGGT TCCGATTTAG TCCCTTACCG CACCTCGACC CAAAAAAACT	700
701	TGATTTAGGGT GTGGTTTACG GTAGTGGGCC ATGGGGCTTG ATAGACGGTT TTTCGGCCCT TTGACGTTGG	770
771	AAGINACGT TTCTTTAAAT AAGTGGACT TCTTGGTTTC CAAAATCTGG GAACCAACCA CTTTAAACCC	840
841	TIAATTTGG CGCTTAATTTC TTTCGGATT TAATTAAGGG GAATTTTGG CGAAATTCTN GGNCCTTINTT	910
911	GGGTINAAAA AAAATGGAGC TTGGATTITA ANCAAAAATT TTAAACCGCG NAAATTTTA ANCCAAAANT	980
981	TIAAGGGGC NCCAAGGGGG CTTCCTTNAA NGGAAAACC GGGAAACCCCG TTGAAAAGG CCCANINCN	1050
1051	CAAAAAA	1120

pCR II / chop - poly - in . Right ,



Model 377
Version 2.1.1

07-GC420

Signal G:259 A:240 T:213 C:240
DT (BD Set Any-Primer)

Page 1 of 3
8:59 AM

Data Collection

File: 07-GC420
Sample: GC420

Comment:

Lane Number: 7
Channel Number: 45
Number of Scans: 12992
Length: 1066

Run started at: [REDACTED] 15:25

Run stopped at: [REDACTED] 02:26

Gel: Gel File

Dyeset/Primer: DT (BD Set Any-Primer)

Comb: 36-well sharks-tooth

Instrument Name: 377

Collect Vers.: N/A

Data Analysis

Base Call Start: 1265

Base Call End: 12992

Primer Peak Loc.: 1265

Signal: G (259), A (240), T (213), C (240)

Matrix Name: dRhodamine

Channels Ave.: 3

Analysis Vers.: Version 2.1.1

Base Spacing: 12.01 - ABI100

1	CGCCAGCTAT	TTAGGTGACA	CATAGAATA	CTCAAGCTAT	GCATCAAGCT	TTGGAACCTT	GAIGAGTCGG	70
71	TGAGGACGAA	ACGATGACAT	TCTGCTGACG	AGATTGCAAG	TCAGGAGAAT	GTCATCGTUG	GTGCCAGGAT	140
141	OCTGCTCTTC	TAATGAGTCC	GTGAGGAAGA	GACCGCCGTA	GAATTCCAAG	GGTCTGCGCA	ACGACGGACGA	210
211	TGAGGTACCA	CATOGTGTGTC	GTGCGCACT	GAIGAGGGCG	TGAGGGCGAA	ACCCCTGACG	CGTTCCTATG	280
281	CGGCCGCTCT	AGAGGGCCCA	AITCCGCCCTA	TAGTGAGTCG	TAITACAAAT	CACTGGCCGT	CGTTTTACAA	350
351	OGTGTGACT	GGGAAAACCC	TGGGTTAAC	CAACITTAATC	GCCTTGCGAG	ACATCCCCCT	TTGOCAGCT	420
421	GGCGTAAATAG	CGAAGAGGCC	CGCACCGATC	GGCCCTTICCA	ACAGTIGGCC	AGCCIGAAATG	GCGAATGGAC	490
491	GGCCCTGTGA	GGGGGGCAAT	AACGGGGGGG	GGTGTGGTGG	TTACGGCCAG	CGTGACCGCT	ACACTTGGCA	560
561	GGCCCTTAGC	GGGGCTCTCT	TTGGCTTCTC	TOCCCTTCCT	TCTGGCCACG	TTCCCGGGCT	TTCCCCGGCA	630
631	AGCCTCAAAT	GGGGGGCTCC	CITTTAGGGTT	CCGATTTAAT	CTTTCACGGG	ACCTTIGACCC	CAAAAAAAACT	700
701	TTGATTAGGG	GTGATGGTTC	ACGTAAGTGG	GNCAATTGGC	CIGATAGACC	GTTTTTTOGG	CCCTTIGACG	770
771	TTGGAAGTCC	ACCGTTCCTT	TAATAGTGG	CCTCTGGTTC	CNAACTTGGG	AAACCACACT	TTAAACCCCT	840
841	ATTTTGGC	CIAATTGTT	TNGAATTAT	TNANGGAAT	TTTGTGCGGA	TTTTTGGGG	CCCTTATGG	910
911	GTAAAAAAAA	ATGGAACATIN	GATTTTAAAC	CAAAAAANTT	TNAACCCGGG	AAATTTTAA	NCCAAAAATT	980
981	TCAAGGGGCC	NCCAANGGC	NTGGTTAA	AGGGAAACC	GGGGAAACCC	CGTTTAA	AGGCCAATT	1050
1051	CCCCNNAAAA	AAACCG						1120

pCR II / chop - B2-m right!



Model 377
Version 2.1.1

09-GC422

Signal G:231 A:216 T:193 C:223
DT (BD Set Any-Primer)

Page 1 of 3
9:00 AM

File: 09-GC422
Sample: GC422

Comment:

Lane Number: 9
Channel Number: 53
Number of Scans: 12992
Length: 1069

Run started at: [REDACTED] 15:25
Run stopped at: [REDACTED] 02:26

Gel: Gel File

Dyeset/Primer: DT (BD Set Any-Primer)

Comb: 36-well sharks-tooth

Instrument Name: 377

Collect Vers.: N/A

Data Analysis

Base Call Start: 1265

Base Call End: 12992

Primer Peak Loc.: 1265

Signal: G (231), A (216), T (193), C (223)

Matrix Name: dRhodamine

Channels Ave.: 3

Analysis Vers.: Version 2.1.1

Base Spacing: 12.01 - ABI100

1	CGOCACCTAT	TTCAGGACA	CATAGAATA	CCTCAAGCT	GCATCAAGCT	TTGGAAACCC	GATGAGCTCG	70
71	TGAGGACGAA	ACCATGACAT	TCTGTGACC	AGAATTCAACCG	TCACCAAGAT	GTCATCGTGC	GTTCCAGGAT	140
141	CCTCGAAGCT	GTCGTGATGAG	TCCGIGAGGA	CGAAAACCGCG	TTCAGAAATTC	CAAGGGCTTG	CCCAACGACG	210
211	AACGATGAGGT	ACCACATGAT	CGTGTGTCG	CACTGATGAG	GGCGTGAGGC	CGAAACCCCTT	GACCGGTCTC	280
281	TATGCGGCCG	CTCTAGAGGG	CCQAATTCGC	CCCTATAGTGA	GTGCGTATAC	AATTCACTGG	CGCGCGTTTT	350
351	ACAAACGTCGT	GACTGGGAAA	ACCCCTGGGT	TACCCAACIT	AATCCCCTTG	CAGCACATCC	CCCTTTCGCC	420
421	AGCTTGGCTA	ATACCGAAGA	GGCCCCCAAC	GAATCCCGCTT	CCCAAACAGTT	GGCGAGCCCTG	AATGGCGAAT	490
491	GGACCGGGCC	TGTAGCGGCG	CATTAAGGC	GGCGGGGTTG	GTGGTTACGC	GCAGCGTGAC	CGCTACACTT	560
561	GGCAGCGGCC	TACCGCGGCCG	TCCCTTCGCT	TTCTTCCCTT	CCCTTCTCGC	CACTGTCGCC	GGCTTTCCCC	630
631	GTCAAAGCTC	TAATATGGGG	GCCTCCCTTA	NGGTTCCGAT	TTAATGCTTT	ACGGNACCTT	GACCCAAAAA	700
701	AACTTGTATA	GGGTGATGGG	TTCACGTAG	TGGGCCATCG	CCCTGATAGA	CGGTTTTGCG	GCCTTTTGAC	770
771	GTGTTGGAACT	CCACGTTCTT	TIAAAATAGTG	GACTCTTGT	TCACAAACCT	GGGAACCAAC	CACTTTAAC	840
841	CCCTTATTTT	TNGGCTAAT	TCTTTTTGG	AAATTATTTA	NGGAATTTC	TGCGCGATTT	TGNGGCTTA	910
911	TTTGGGGTTA	AAAAAAATGG	AAGCTTGGAT	TTTTAANCA	AAAAAAATTTC	TAACCGCGGA	AAATTTTTAA	980
981	CCCAAAATTC	TCAAGGGGCC	CCNAAGGGGC	TTTGNNTTAA	AGGNAAAAC	CGGGAACCCC	CTTINNAAAA	1050
1051	AGGCCCGAGT	NCNNANT						1120

pCR II / chop - C3

Right :



Model 377
Version 2.1.1

10•GC423

Signal G:219 A:202 T:185 C:202
DT {BD Set Any-Primer}

Page 1 of 3
9:00 AM

Data Collection

File: 10•GC423
Sample: GC423
Comment:
Lane Number: 10
Channel Number: 58
Number of Scans: 12992
Length: 1058
Run started at: [REDACTED] 15:25
Run stopped at: [REDACTED] 02:26
Gel: Gel File
Dyeset/Primer: DT {BD Set Any-Primer}
Comb: 36-well sharks-tooth
Instrument Name: 377
Collect Vers.: N/A

Data Analysis

Base Call Start: 1292
Base Call End: 12992
Primer Peak Loc.: 1292
Signal: G (219), A (202), T (185), C (202)
Matrix Name: dRhodamine
Channels Ave.: 3
Analysis Vers.: Version 2.1.1
Base Spacing: 12.02 - ABI100

1	CCAGCTATT AGGTGACACT ATAGAATACT CAAGCTATTC ATCAAGCTTT GGAACCTGAA TGAGTCGGTG	70
71	AGGACGAAAC GATGACATTC TGCTGACCG ATTACCGGTC AGCAGAAAGT CATCGTGGT TCCAGGATCC	140
141	TGGAAGCTGT CTGATGAGTC CGTGAGGACG AAACCGGGTT GAGAATTCCA AGGGTCCTGG CAACGACGAC	210
211	CATGAGGTAC CACATCGTGG TGTTGGCA CTGATGAGGC CGTGAGCCCG AAACCCCTGA CGCGTTCTTA	280
281	TGGGCCGCT CTAGAGGGCC CAATTCGCCC TATAGTGAGT CGTAACTAACAA TTCACTGGGC GTGTTTAC	350
351	AACGTGCTGA CTGGGAAAC CCTGGGGTTA CCCAACITAA TCGCTTGCAC GCACATCCCC CTTTGGCCAG	420
421	CTGGCTTAAT AGCGAAGAGG CCGGCACCGA TCGGCTTTC CAACAGTTCG GCAGCTGPA TGGGAATGG	490
491	AOGGCCCTG TAGGGGGCA TTAAGGGGG CGGGTGTGGT CGTTACCGC AGCGTGAAGG CTACACTTGC	560
561	CAGGCCCTA CGCCCGCTTC CTTTCGCTTT CTTTCGCA CGTGGCGG CTTTCCCGT	630
631	CAAGCTCTAA ATCGGGGGCT TCCCTTGGGG TCCCGATTTA GTGCTTACG QNACCTINGAC CCCAAAAAAC	700
701	TTCATTAGGG TGATGGTCA CGTAGCTGGC CATTCGGCTG ATAGAACGGT TTTTGGCCCT TTTTACGTT	770
771	TGGAGCTCCA AGGTCTTTT AATAGTGGAC TCTTTGGTT CCCAAACTGG GAACCAACCA CTTAAACCC	840
841	TTATINITGG GNCITATTIC CTTTTGGAA TTAAATTAG GGGAAATTG GCGCAATTG TCGGGCCCTT	910
911	TTINGGGTIN AAAAAAATG GAGCTGANT TTAAACCAA AAATTINAA CGCGGAAAN TTAAACCA	980
981	AAAANTTINA GGCGGGCCCA ANGGGGCTTG NTAAAGGG GAAACCCGGG AACCCCTT TAAAAGCCC	1050
1051	AAATTCCCC	1120

pCR II / chop - v3 Right!



Model 377
Version 2.1.1

11-GC424

Signal G:245 A:228 T:202 C:231
DT {BD Set Any-Primer}

Page 1 of 3
9:00 AM

Data Collection

File: 11-GC424
Sample: GC424
Comment:
Lane Number: 11
Channel Number: 62
Number of Scans: 12992
Length: 1057
Run started at: [REDACTED] 15:25
Run stopped at: [REDACTED] 02:26
Gel: Gel File
Dyeset/Primer: DT {BD Set Any-Primer}
Comb: 36-well sharks-tooth
Instrument Name: 377
Collect Vers.: N/A

Data Analysis

Base Call Start: 1280
Base Call End: 12992
Primer Peak Loc.: 1280
Signal: G (245), A (228), T (202), C (231)
Matrix Name: dRhodamine
Channels Ave.: 3
Analysis Vers.: Version 2.1.1
Base Spacing: 12.01 - ABI100

1	CCAGCTTATT TAGGTGACAC TATAGAACAC TCAACCTATG CATCAAGCTT TCGAACCTTG ATGAGTCGGT	70
71	GAGGAGCAA CGATGACATT CTGCTGACCA GATTGACGGT CAGCAGAATG TCATGTCUGG TTGAGGAGTC	140
141	CTCTTCGACT GATGAGTCGG TGAGGAGAA ACAATGGCTGA ATTCCAAGGG TCTGGCAAC GAOGACGGTG	210
211	AGGTACCACA TCGTGTGCTGT TCGGACTGTA TGAGGCGTGT AGGGGAAAC CCTTGACGGG TTGCTATGCG	280
281	GGCGCTCTAG AGGGCCCAAT TCGCCCTATA GTGAGTGTGA TTACAATICA CTGGCGCTCG TTTTACAACG	350
351	TGTTGACTGG GAAAACCTTG GGGTTACCCA ACTTTAATGCG CTGGCAGCAC ATCCCCCTTT CGCCACCTGG	420
421	CGTAAATAGCG AAGAGGGCCCG CACCGATCGC CCTTCCCAAC AGTTGCGCAG CCTGAAATGGC GAAATGGACGC	490
491	GGCGTGTAGC GGCGCATATAA GGGGGGGGGG TGIGGGGGTT ACCGGCAGCG TGACCGCTAC ACTTGOCAGC	560
561	GGCGTACGCC CGCGTCCCTT CGCTTCTCTC CCTTCCCTTC TCGGCCACGGT CGCGGGCTTT CGCGTCAAG	630
631	CCTCTAAATCG GGGGTCTCCCT TTAGGGTTCG GATTAGTGTG TTTACGGGAC CTGGACCCCA AAAAACCTGGA	700
701	TTAGGGTGAA TGGTTCACTGT AGINGGGCA TTGGCCCTGA TANAGGGTTT TTGCGCCCTT TGGACCTTGT	770
771	GAAGTCCACG TTINITTTAT AGNGGACNTT TTGGGTCCAA AACTGGNACC AACNNNTNA ACCCTTATTT	840
841	TGGGTCTAAT TCTTTTGGGA ATTITTTAAG GGGATTTTG CGCGGATTTT CGGGCCCTNT TGGGGTINA	910
911	AAAAAAATGGA ACCTTGATT TTACCCAAAA AATTTTAAAN CGCGGAATT TTGTTAACCA AAATTTTANG	980
981	GGGGCCCCAAA GGGGGCTTIG NTTAAAGGG GAAACCGGG AACCCCTTIN AAAAGGCC TTTCCCCNAA	1050
1051	AAANANG	1120

PCR & / chop - C9 Right!



Model 377
Version 2.1.1

13-GC426

Signal G:288 A:270 T:244 C:265
DT {BD Set Any-Primer}

Page 1 of 3
9:00 AM

Data Collection
File: 13-GC426
Sample: GC426

Comment:
Lane Number: 13
Channel Number: 72
Number of Scans: 12992
Length: 1041

Run started at: [REDACTED] 15:25
Run stopped at: [REDACTED] 02:26
Gel: Gel File
Dyeset/Primer: DT {BD Set Any-Primer}
Comb: 36-well sharks-tooth
Instrument Name: 377
Collect Vers.: N/A

Data Analysis

Base Call Start: 1280

Base Call End: 12992

Primer Peak Loc.: 1280

Signal: G (288), A (270), T (244), C (265)

Matrix Name: dRhodamine

Channels Ave.: 3

Analysis Vers.: Version 2.1.1

Base Spacing: 12.02 ~ ABI100

1	CCAGCTTAATT AGGTGACACT ATGAGAATAGT CAAGCTTAATGC ATCAAGCTTT CGAACCCCTGA TGAGTCGGTG	70
71	AGGACGAAAC GATGACATTC TGCTGACCGAG ATTCAAGGTC ACCAGAAATGT CATCGTCGGT TCCAGGATCC	140
141	TCTTGGACTAAT ATGAGTCGGT GAOGGAGGAAGA CATGGCTGAA TTCCAAGGGT CTGGCCAAACG ACCACCATGA	210
211	GGTACACAT CGTGGTGGT GGGCACTGAT GAGGCGGTGA CGCCGAAACC CTGACCGGT TCTTATGGGG	280
281	CGGCTCTAGA GGGCCCAATIT CGGCGTATAG TGAGTCGGT TACAATTCAAC TGCGCGTGGT TTTACAAACGT	350
351	CGTGAATGGG AAAACCCCTGG CGTGTACCCAA CTTAAATGCC TTGAGCACA TCCCGCTTTC CGCAGCTGGC	420
421	GTAATACCGA AGAGGGGGCG ACCGGATGGC CTTCCCAACA GTGGCGCAGC CTGAAATGGCG AATGGACCGG	490
491	CGCTGTAGCG CGGCATTAAG CGGGGGGGT GGGGGTTA CGCCGAGGT GACCGCTACA CTGGCCAGGG	560
561	CGCTTACGGCC CGCTCCCTTC GCTTTCCTCC CTTCCTTCTC CGCCACGTTG CGCGGCTTTC CGCGTCAGC	630
631	TCTAAATCGG GGGCTCCCT TAGGGTTCGG ATTATAGGCT TTACGGNACC TCGACCCCAA AAAACTTGT	700
701	TAGGGTGTAG GGTCAGGTAG TGGGCCATCG CGCTTGGATAG ACGGTTTTCG CGCGCTTTCGAC GTTGGAAAGIN	770
771	CACGGTCTTT AATAGTGGAC TTCTTGGTC CAAACCTGGG ACAACACTIN AACCCCTTATC TTGGNCATAT	840
841	TCTTTTGTAA TTATTTAAG GGAATTTCGC CGGATTTCGC GGGCTTATIN GGTTAAAAA AAATGGAAAGC	910
911	TIGANTTTA ACCAAAAAAAT TTGAAACCGC GGAAATTGTT ACCAAAAAAAT TTGAAAGGG CGCCAAGGGG	980
981	CTTGCTTAA AGGGGAANCC GGGAACNNCC TTGAAAGGG CGCCAAGNNCC GCAANAAAAN G	1050

pCRT / chop - C9-m Right!



Model 377
Version 2.1.1

15-GC428

Signal G:316 A:288 T:245 C:276
DT {BD Set Any-Primer}

Page 1 of 3
9:01 AM

Data Collection

File: 15-GC428
Sample: GC428

Comment:

Lane Number: 15
Channel Number: 81
Number of Scans: 12992
Length: 1079
Run started at: [REDACTED] 15:25
Run stopped at: [REDACTED] 02:26
Gel: Gel File
Dyeset/Primer: DT {BD Set Any-Primer}
Comb: 36-well sharks-tooth
Instrument Name: 377
Collect Vers.: N/A

Data Analysis

Base Call Start: 1268

Base Call End: 12992

Primer Peak Loc.: 1268

Signal: G (316), A (288), T (245), C (276)

Matrix Name: dRhodamine

Channels Ave.: 3

Analysis Vers.: Version 2.1.1

Base Spacing: 12.01 - ABI100

1	CNCCAGCTAT	TAGGTGACA	CTATAGAATA	CICAAGCTAT	GCATCAAGCT	TTGGAACCT	GATGAGTOCC	70
71	TGAGGACGAA	ACGATGACAT	TCTGCTGACC	AGATTCACGG	TCACCGAAAT	GTCATCGCTCG	GTTCAGGAT	140
141	CCCTCAAAGA	CITATGAGTC	CGTGGAGGACG	AAACGAGGAT	CGAAATTCCAA	GGGTCTGCC	AACGACGACG	210
211	ATGAGGTACC	ACATCGTGT	CGTGTGCGAC	TGATGAGGCC	GTGAGGCCGA	AACCCCTTGAC	GCGTCTCTAT	280
281	GCGGCCCTC	TAGAGGCC	AATTGCGCTT	ATAGTGAGTC	GTATTACAAT	TCACTGGCG	TGGTTTTACA	350
351	ACGTCGIGAC	TGGAAAAACC	CTGGCGTTCAC	CCAACCTTAAT	CGCCTTGAG	CACATCCCCC	TTTQCCCAGC	420
421	TGGCGTAATA	CGCAAGAGGC	CGCGAACGAT	CGCGCTTCC	AACAGITGCG	CAGCTGAAAT	GGCGAATGGA	490
491	CGCGCCCTGT	AGCGGGCGAT	TAAGGGGGC	GGGTGTGGG	GTATCCCGCA	GGTGAACCGC	TACACITGCC	560
561	AGCGCCCTAG	CGCGCGCTC	TTTGGCTTTC	TTCCCTTCT	TTCCTGGCAC	GTGCGCGC	TTTCCCCGTC	630
631	AAGCTCTAAA	TGGGGGGCTC	CCCTTAGGGT	TCCGATTAA	GTGCTTTCAG	GNACCCINGAC	CCCAAAAAAAC	700
701	TGATTTAGGG	TGATGGGTTTC	ACGTAATGGG	CCATGGGGCT	GATAGACGGG	TTTTTGCGCC	TTTTGACGTT	770
771	CGAAGTTC	CGTTTC	AAATAGTGCGA	CTCTTGTG	CCAAAACCTG	GGAAACCAACC	ACTTTAAACC	840
841	CCTTATINIT	NGGGCTTAAT	TGCTTTTNGA	ATTTAATTAA	GGGGATTTT	TGGCGAANT	TTCNGGGCT	910
911	TATTTGGGT	TAACCAAA	TGGAANCCTG	GATTTINAAC	CCAAAAAAAN	TTTTAAACCG	CGGAAAAATT	980
981	TITAANCCAA	AAATTICAAN	GGGGCNC	ANGGGCCCT	GGTTINAAG	GGAAACCG	GNAACCCCT	1050
1051	TINAAAAAGG	NCCAATTINCC	CCCAAAAAAA					1120

pCR II / chop - Pol I Right!

Sample



Model 377
Version 2.1.1

05-GC418

Signal G:263 A:241 T:214 C:236
DT {BD Set Any-Primer}

Page 1 of 3
8:59 AM

File: 05-GC418
Sample: GC418

Comment:

Lane Number: 5
Channel Number: 36
Number of Scans: 12992
Length: 1091

Run started at: [REDACTED] 15:25
Run stopped at: [REDACTED] 02:26

Gel: Gel File

Dyset/Primer: DT {BD Set Any-Primer}
Comb: 36-well sharks-tooth

Instrument Name: 377

Collect Vers.: N/A

Data Analysis

Base Call Start: 1265

Base Call End: 12992

Primer Peak Loc.: 1265

Signal: G (263), A (241), T (214), C (236)

Matrix Name: dRhodamine

Channels Ave.: 3

Analysis Vers.: Version 2.1.1

Base Spacing: 12.00 - ABI100

FDR

Hind II

Bam H,

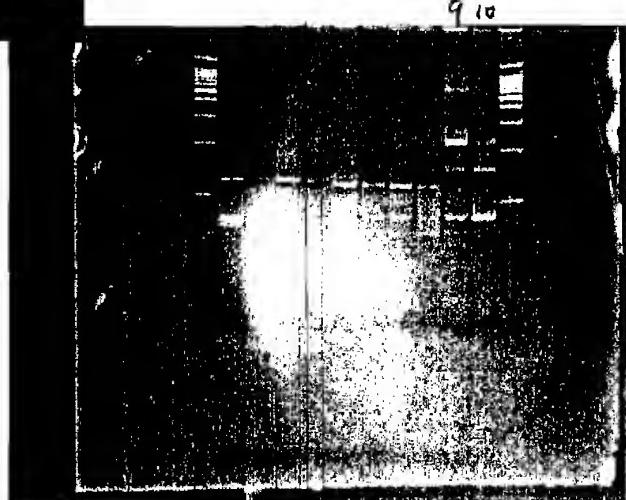
1	CNCCAGCTAT	TGAGGTGACA	CATATAGAATA	CTCAAGCTAT	GCATCAAGCT	TIGGAACOCT	GATGAGTCGG	70
71	TGAGGACGAA	AAGATGACAT	TCTGCTGACC	AGATTCAAGG	TCAGGAGAT	GTCATCGTGG	GTCAGGAT	140
141	CCCTGCTCTTC	TGATGAGTCC	GIGAGGACCA	AAACCCCTGA	GAATTCAG	GGTCCTGCGCA	ACGACCGAGGA	210
211	TGAGGTACCA	CATCGTGTGTC	GTGCGCACT	GATGAGGGCG	TGAGGCCGAA	ACCTTGAOG	CGTTCTATG	280
281	CGCCCGCTCT	AGAGGGCCCA	ATTCGCCCCA	TAGTGAGTGG	TATTACATT	CACITGGCGT	CGTTTTACAA	350
351	CGTGTGACT	GGGAAAACCC	TGGCGTTAAC	CAACHTTAATC	GCTTTCGAGC	ACATCCCCCT	TIGOCAGCT	420
421	GGCGTAATAG	CGAAGAGGCC	CCCACCGATC	GCCCTTCCA	ACAGITGGGC	AGCTTGAATG	GCGAATGGAC	490
491	GGCCCTCTGTA	GGGGGCCATT	AAGGGGGGGG	GGGGGGGG	TTACCGCCAG	CGTGACCGCT	ACACCTCCCA	560
561	GGCCCTTAGC	GGGGGCTCT	TTCGCTTCT	TCCCTCCCT	TCTCGCCACG	TTCCCGGGCT	TTCCTCGTCA	630
631	AGCTCTAAAT	GGGGGGCTCC	TTTACGGGTC	CGGATTTAAT	GCTTTCAGGG	ACCTTGACCC	AAAAAAACCT	700
701	GATAGGGTC	ATGGGTCAAG	TAATGGGGC	AINGNCTTG	ATAGACGGT	TTTGNCTT	TIGACGTTG	770
771	QNAGINCAAC	GTITONNTT	AAATAGICGGA	CCCTNITGGT	TCCCAAACCT	GGGAACCAAA	CAACTTAAAA	840
841	NCCCTTTTC	TTGGGGGCT	AAITCCCTTT	TGGANITTTA	TINAAGGGGG	ATTTTTGGC	CCGAATTTC	910
911	NGGGCTTTT	TIGGGGTAA	AAAAAAAATG	GAGCTGGGA	TTTIAACCC	AAAAANTTT	TAACCOGGGG	980
981	AAATTTTTA	ACCAAAAAAT	TTCANGGGC	NCCCAAGGG	GGCTTGTNT	TAAAGGGAA	AACCGGGAAA	1050
1051	CCCCCTTTTA	AAAAGGGCC	ATTCGCCCCN	AAAAAAACCN	G			1120

PCR II / chop - B2

right!

Chop^{#3}: HindII - BglII - SphI - XbaI.

1.	Ge isolate	[REDACTED]	PCR #1 +	[REDACTED]	1. +	[REDACTED]	1. (chop)	
		[REDACTED]	PCR #2 +	[REDACTED]	#4. (dG - chop)	[REDACTED]	[REDACTED]	
1.	Primers		templet					
1.	413 + 414		> pNewclip			57°C	Annealing	
2.	413 + 415					94°C	30"	
3.	413 + 414		> pChop #3			57°C	40"	
4.	413 + 415					72°C	1'	
5.	431 + 433		> pNewclip					
6.	432 + 433							
7.	431 + 433		> pChop #3					
8.	432 + 433							
9.	413 + 433		Chop temp					
10.	413 + 433		dG chop temp					



Get pretty fine
ion bands of anal 16

PCR screen condition:

	1	2	3	4	5	6	7	8	9	.
10 pm	104				1 ml					
..	105				1 ml.					
1 ml	4 mM dNTP.									
Tag 1u/x				1 ml						
Buffer				2 ml						
MgCl ₂ 25 mM.				2 ml						
DNA				1 ml	(cells)					
H ₂ O				11 ml						

94°C 30"
52°C 40"
72°C 60"

28 cycle.

Run 1.6% gel check:

Marker. φX174 6ul 1-14. pERT PCR.
" 15-28 "

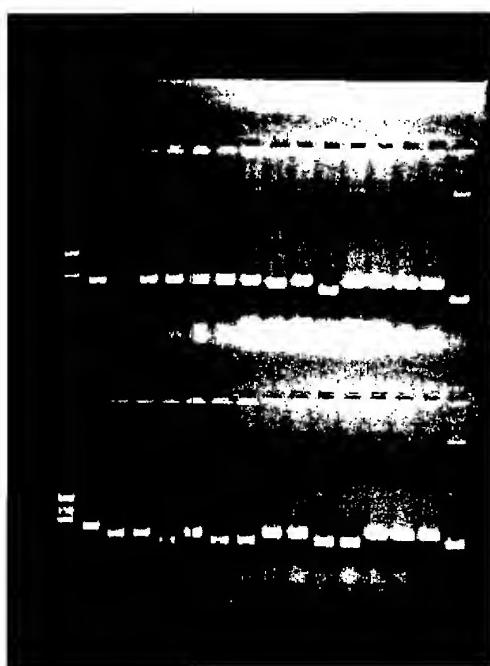


IMAGE SIZE (640 x 480 x 8).
STRATEGENE EAGLE EYE II
ACQUIRED [REDACTED] 21:56:14
INT. PERIOD = 0.40 SEC.

Chop:

1. 3. 4. 5. 6.

dG-Chop,

7. 9. 11. 12.

13. 14. 15.

maybe right.

Invertate to
1R + A.D

9627-22-20150101-1

Isolate plasmid. Cut them with BamH₁ or EcoR₁ old Chop #3 as Control. (cut 3.5 ml)

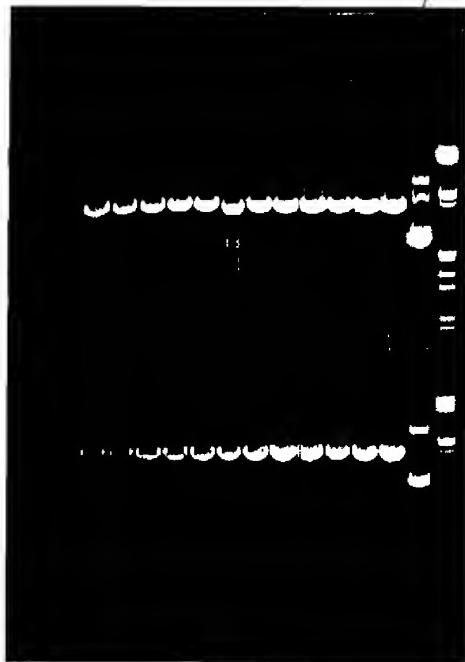
Lane order:

BamH₁ 1, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, old #3, Marker

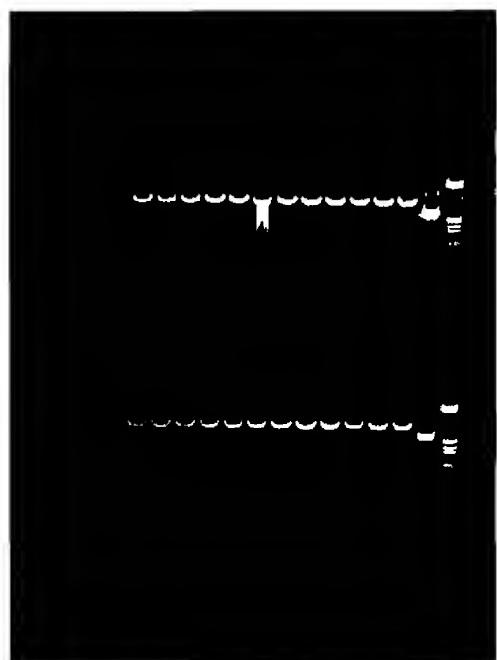
EcoR₁

#3.old.

BamH₁



EcoR₁



8ml

Hind₂,

TRACER SIZE 1.0 kb - 3.6 kb
IN PERIOD = 0.74 SEC
ACQUIRED

STRUCTURE ENGINEER II

old #3 is: Hind₂ - Bgl₂ - Sty₁ - Xba₁. Can't be a
all of the candidate can be cut. Sent to

Plan to Put B2 . B2 mutant . C3 . C3 mutant . C9 .
 C9 mutant . polI . polI mutant to Chop .
 B2 . C3 . C9 . polI to dG-chop .

Anneal oligos :

1	Claw 439 + Claw 440	B2
2	" 441 + 442	B2 mutant
3	443 + 444	C3
4	445 + 446	C3 mutant
5	447 + 448	C9
6	449 + 450	C9 mutant
7	455 + 456	PolI
8	457 + 458	PolI mutant .

1 μm each in 50 μl H₂O . 95°C 10 min . Continue
 reduce temperature to RT within 1 h .

Put C3, C9 B2, pol12 to chop / PCR

EFFICIENCY LINE: 22-2205

Chop #4. GC387 is right! Finally!

Inoculate with the 25 ml LB + Amp.

Make stocks: PCR / Chop. 1/98.

Isolate plasmid. If miniprep. Final
320 uL. 0.2 ug/uL.

Cut with BamH1 + EcoR1:

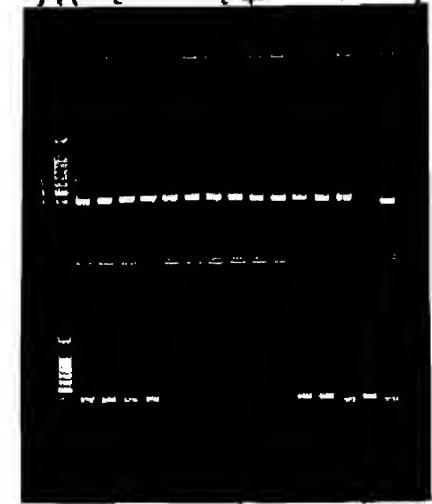
1. 30 uL DNA + 30 uL H2O + 7 uL N2B2, 1.5 uL BamH1,
1.5 uL EcoR1

* 2. 20 uL sequencing left. - - - .

1% Seaplaque gel isolate. GeneClean.
Final wash H2O

Use 2 ligation

		Buffer	Lysate
B2	1-10.5 uL + 2 uL V	1.2 uL	0.6 uL
B2-m	"	"	"
C3	"	"	"
C3-m	"	"	"
C9	"	"	"
C9-m	"	"	"
pol1	"	"	"
pol1-m	"	"	"
chop/PCR	HindII/XbaI Vector only	#2.2 uL "	"
add H2O to	12 uL	18°C 0/N	"



Transform 5/7 ligation stuff to DH5 α .

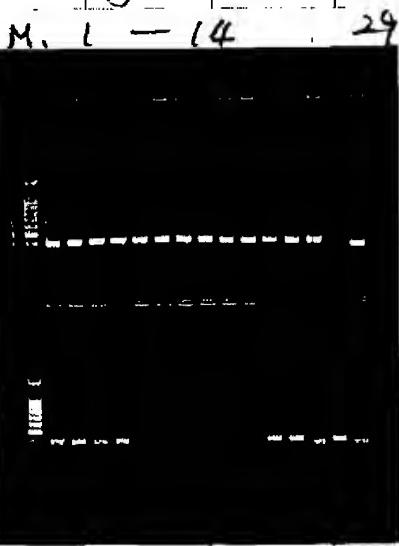
PCR Screen

	B2	: 1-6	C9 : 25 - 28
(04	B2-m.	: 7-12	C9-m : 31 - 36
(05	C3	: 13-18	pol2 : 37 - 39
	C3-m.	: 19-24 X	pol2-m : 40 - 42

29. 30. pPER/Chop V.

387. 388. pIND/Chop : 47-56, 57 = pINDV.

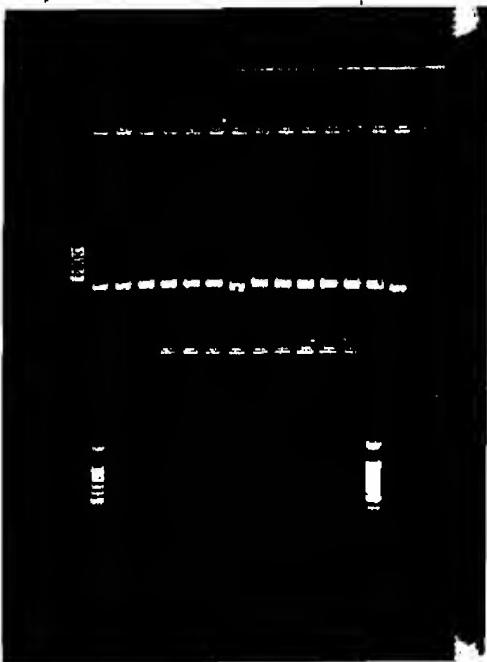
Run gel.



#14 is strong

#19-24 all of the C3-m are wrong.

#27 is strong.



AMPADE
EFFICIENCY LINE # 22-206
STRATEGIC ELECTROPHORESIS
17:27:28

Inoculate these to 4ml LB + Amp:

B2 = 1, 2.

C9 = 25, 26.

B2-m = 7, 8.

C9-m = 31, 32.

C3: 13, 15.

D012: 37, 38.

D012-m: 40, 41.

Isolate plasmids

OD₂₆₀:

		OD ₂₆₀	
B2	#1	0.08232	Gc 418
	2	0.09574	419
B2-m	.7	0.08361	420
	.8	0.09139	421
C3.	13	0.11688	422
	15	0.11341	423
C9	25	0.09106	424
	26	0.11543	425
C9-M	31	0.09956	426
	32	0.10767	427
P012	37	0.04975	428
P01 I	38	0.11219	429
P012-m	40	0.08922	430
	41	0.12112	Gc 431

according to Seq. recd

Save

Sent to be sequenced using Clew 105

PIND/Chop. #50 0.09663 Gc 432 ✓

PIND/Chop #51 0.10231 Gc 433 ✓